(e.g., ~0.35 μm). The shift in average amplitude is represented by truncated and smoothened peaks while the valleys are not as affected by the blasting process due to being recessed.

[0128] FIG. **16** illustrates an exemplary electronic microscope image of a top view of a metal part having an anodic layer, in accordance with some embodiments. FIG. **16** illustrates an exemplary electron microscope image of a blasted anodized part **1600**—e.g., the blasted anodized part **1220**—in accordance with some embodiments. The blasted anodized part **1600** includes an external surface **1602** having an anodized layer **1604** that overlays portions of the peaks (P) and the valleys (V). As illustrated in FIG. **16**, there is a sufficient amount of the anodized layer **1604** to impart the blasted anodized part **1600** with a thin-film interference color that is resistant to abrasion. As is understood by those of ordinary skill in the art, different thin-film interference colors are imparted by the thicknesses of the anodized layer. The amplitude of the anodizing voltage may affect the thickness of the anodized layer **1212**.

[0129] FIG. **17** illustrates an exemplary diagram of an etched metal part, in accordance with some embodiments. In particular, the etched metal part may correspond to any one of the texturized metal part **230**, the blasted metal part **1130**, the blasted anodized part **1220**, or the multiple anodized part **1230**. As described above, any one of these etched metal parts may include peaks and valleys along an actual surface (AS), which are defined as vertical deviations (Vd) from a nominal surface (NS) of the etched metal part. The vertical deviations (Vd) over the nominal surface (NS) occur over a specified length (L) over the etched metal part. The vertical deviations (Vd) can include positive vertical deviations that extend above the nominal surface (NS) and negative vertical deviations that extend below the nominal surface (NS). The positive vertical deviations are in the form of peaks and the negative vertical deviations are in the form of valleys.

[0130] Any ranges cited herein are inclusive. The terms "substantially", "generally," and "about" used herein are used to describe and account for small fluctuations. For example, they can refer to less than or equal to ±5%, such as less than or equal to ±2%, such as less than or equal to ±1%, such as less than or equal to ±0.5%, such as less than or equal to ±0.1%.

[0131] The various aspects, embodiments, implementations or features of the described embodiments can be used separately or in any combination. Various aspects of the described embodiments can be implemented by software, hardware or a combination of hardware and software. The described embodiments can also be embodied as computer readable code on a computer readable medium for controlling manufacturing operations or as computer readable code on a computer readable medium for controlling a manufacturing line. The computer readable medium is any data storage device that can store data which can thereafter be read by a computer system. Examples of the computer readable medium include read-only memory, random-access memory, CD-ROMs, HDDs, DVDs, magnetic tape, and optical data storage devices. The computer readable medium can also be distributed over network-coupled computer systems so that the computer readable code is stored and executed in a distributed fashion.

[0132] The foregoing description, for purposes of explanation, used specific nomenclature to provide a thorough understanding of the described embodiments. However, it will be apparent to one skilled in the art that the specific details are not required in order to practice the described embodiments. Thus, the foregoing descriptions of specific embodiments are presented for purposes of illustration and description. They are not intended to be exhaustive or to limit the described embodiments to the precise forms disclosed. It will be apparent to one of ordinary skill in the art that many modifications and variations are possible in view of the above teachings.

What is claimed is:

1. An enclosure for a portable electronic device, the enclosure comprising:

a titanium substrate defining a textured surface having peaks separated by valleys, wherein apexes of the peaks are separated from troughs of the valleys by at least 2 micrometers, the textured surface having a gloss value that is greater than 90 gloss units as measured at 60 degrees by a gloss meter.

2. The enclosure of claim **1**, wherein the textured surface has an Sdq (root mean square gradient) that is greater than 0.2 micrometers.

3. The enclosure of claim **1**, wherein the textured surface has an Sq (root mean square height) that is greater than 0.2 micrometers.

4. The enclosure of claim **1**, wherein the textured surface has a gloss value that is greater than 20 gloss units as measured at 20 degrees by the gloss meter.

5. The enclosure of claim **1**, further comprising:

an anodized layer that overlays a portion of the textured surface.

6. The enclosure of claim **5**, wherein the anodized layer has a thickness between 20 nm to 200 nm.

7. An enclosure for a portable electronic device, the enclosure comprising:

a titanium substrate defining textured surface having peaks separated by valleys, wherein the textured surface has an Sq (root mean square height) that is greater than 0.2 micrometers; and

an anodized layer that overlays a portion of the textured surface.

8. The enclosure of claim **7**, wherein the anodized layer has a thickness between 20 nm to 200 nm.

9. The enclosure of claim **8**, wherein the anodized layer has a color that depends on the thickness of the anodized layer.

10. The enclosure of claim **7**, wherein, using a CIE L*a*b* color space model, the anodized layer has an a* value between −6 to 10 and a b* value between −20 to 30.

11. The enclosure of claim **7**, wherein tops of the peaks are separated from bottoms of the valleys by a separation distance of 2 micrometers or greater.

12. The enclosure of claim **11**, wherein the anodized layer overlays more of the valleys than the peaks.

13. The enclosure of claim **7**, wherein the textured surface has an Sdq (root mean square gradient) that is greater than 0.2 micrometers.

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